Remarks

Reconsideration of the application is respectfully requested in view of the foregoing amendments and following remarks.

Claims 1-53 are pending. No claims have been canceled.

A.   Entry of Previous Amendment After Final

Please confirm that the Amendment after Final filed January 7, 2003 has been entered. (The amendments in the Amendment after Final filed January 7, 2003, were made to respond to the Examiner's objection to the specification regarding incorporation of the certificate of correction.)

B.   Amendments to Claims

Pending claim 48 has been amended by adding the phrase "comprising a plurality of sink objects and a plurality of source objects" to the preamble, and by changing the phrase "communicating with a sink object from the source object" to "communicating with a sink object from a source object." Support for these amendments can be found, for example, in claim 39 (hereafter, "patent claim 39") in United States Patent No. 5,485,617 to Stutz et al. (hereafter, the '617 patent).

Pending claim 49 has been amended by replacing the word "connect" with the phrase "generate a connection between" in the preamble. Support for this amendment can be found, for example, in claim 42 in the '617 patent (hereafter, "patent claim 42").

Pending claim 50 has been amended by adding the phrase "the computer system having a plurality of sink objects and source objects," to the preamble. Support for this amendment can be found, for example, in claim 44 in the '617 patent (hereafter, "patent claim 44").

C.   Recapture

The pending claims in their present form do not improperly recapture surrendered subject matter. The Examiner states that claims 48-50 and 52 "are rejected under 35 U.S.C. § 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for patent upon which the present reissue is based." [*See* Office Action of October 2, 2003 ("the Action") at p. 2.] Although applicants agree with the Examiner's statement that "[a] broadening aspect is present in the reissue which was not present in the application for patent," Applicants respectfully disagree

with the Examiner's statement that "[t]he record of the application for patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application." [*See* Action at p. 3.]

At page 3 of the Office Action of July 30, 2001, the Examiner stated, "There is no issue of recapture." The current rejection contradicts the Examiner's earlier statement. Nevertheless, Applicants address each of the rejected claims below.

1.   Claim 48

Previously, the Examiner rejected pending claim 48 due to alleged recapture of subject matter surrendered during prosecution of claim 27 in the '617 patent (hereafter, "patent claim 27"). Applicants respectfully disagree.

Pending claim 48 is a computer-readable medium claim based on patent claim 39 rather than patent claim 27, and does not improperly recapture surrendered subject matter. The differing language in pending claim 48 is primarily a result of recasting patent claim 39 in the form of a computer-readable medium claim. In addition, pending claim 48 includes language directed to, for example, "notification interfaces" rather than "notification function members." However, "notification function members" was in the *original language* of patent claim 39. Therefore, the presence of the phrase "notification function members" in patent claim 39 does not indicate surrendered subject matter.

Pending claim 48 and patent claim 39 are reproduced below, with emphasis added to point to claim language that shows that pending claim 48 does not involve improper recapture.

> 48. A computer-readable medium having computer-executable instructions for causing a computer system comprising **a plurality of sink objects and a plurality of source objects** to **dynamically connect objects** by:
> **communicating with a sink object from a source object** via a **notification** interface;
> **storing a plurality of notification** interfaces referenced by **a plurality of connection point objects** wherein **each source object** is coupled to a **connection point object**; and
> **returning an identification of one of the** notification interfaces **from the** stored **plurality of** notification interfaces **upon request**.

> 39. A computer system for **dynamically connecting objects**, the system comprising:
> **a plurality of sink objects**, each sink object having a **notification** function member for **communicating with the sink object from the source object**;

a plurality of source objects, each source object having **a plurality of connection <u>point objects</u>**, each **connection point <u>object</u> storing a plurality of notification** function members and **returning an identification of <u>one of the</u> notification** function members **from the stored <u>plurality of</u> notification** function members **upon request.**

Underlined language in patent claim 39 indicates language that was added to the claim during prosecution of the '617 patent. Where applicable, the same language is underlined in pending claim 48. Because pending claim 48 recites "notification interfaces" rather than "notification function members," the word "members" was not added to pending claim 48.

As shown in the comparison above, the relevant language that was added during prosecution of patent claim 39 is included in pending claim 48. Pending claim 48 does not improperly recapture surrendered subject matter, and should be allowable.

2.   <u>Claim 49</u>

Previously, the Examiner rejected pending claim 49 due to alleged recapture of subject matter surrendered during prosecution of claim 1 in the '617 patent (hereafter, "patent claim 1"). Applicants respectfully disagree.

Pending claim 49 is a computer-readable medium claim based on claim 42 rather than patent claim 1, and does not improperly recapture surrendered subject matter. Patent claim 42 was not amended during prosecution. The differing language in pending claim 49 is primarily a result of recasting patent claim 42 in the form of a computer-readable medium claim. In addition, pending claim 49 recites "identify instances" rather than "enumerate the instances." However, "enumerate the instances" was in the *original language* of patent claim 42. Therefore, the presence of the phrase "enumerate the instances" in patent claim 42 does not indicate surrendered subject matter.

Pending claim 49 and patent claim 42 are reproduced below, with emphasis added to point to claim language that shows that pending claim 49 does not involve improper recapture.

> 49. A computer-readable medium having computer-executable instructions stored thereon for causing a computer system to **generate a connection between a source object and a sink object, the sink object having an instance of a notification interface for receiving communications from the source object, the notification interface having an associated interface identifier, the source object having instances of a connection point interface, each instance of the connection point interface having an associated interface identifier,** the computer system directed by said instructions to perform the steps comprising:
> **receiving a request to** identify **instances of the connection point interface;**

sending a reference to each instance of the connection point interface, wherein from each reference the sink object obtains an indication of the interface identifier associated with the instance;

receiving, through one of the instances of the connection point interface, a request to connect the source object and the sink object, the request having a reference to the notification interface instance of the sink object, wherein the interface identifier associated with the receiving connection point interface corresponds to the interface identifier associated with the notification interface of the sink object; and

storing the reference to the notification interface instance, wherein the source object communicates with the sink object using the stored reference to the notification interface instance.

42. A method in a computer system for generating an **object connection between a source object and a sink object, the sink object having an instance of a notification interface for receiving communications from the source object, the notification interface having an associated interface identifier, the source object having instances of a connection point interface, each instance of the connection point interface having an associated interface identifier,** the method comprising the steps of:

receiving a request to enumerate the **instances of the connection point interface;**

sending a reference to each instance of the connection point interface, wherein from each reference the sink object obtains an indication of the interface identifier associated with the instance;

receiving, through one of the instances of the connection point interface, a request to connect the source object and the sink object, the request having a reference to the notification interface instance of the sink object, wherein the interface identifier associated with the receiving connection point interface corresponds to the interface identifier associated with the notification interface of the sink object; and

storing the reference to the notification interface instance, wherein the source object communicates with the sink object using the stored reference to the notification interface instance.

As shown in the comparison above, pending claim 49 does not improperly recapture surrendered subject matter, and should be allowable.

3.   **Claim 50**

Previously, the Examiner rejected pending claim 50 due to alleged recapture of subject matter surrendered during prosecution of patent claim 27. Applicants respectfully disagree.

Pending claim 50 is a computer-readable medium claim based on patent claim 44 rather than patent claim 27, and does not improperly recapture surrendered subject matter. Patent claim

44 was not amended during prosecution. The differing language in pending claim 50 is primarily a result of recasting patent claim 44 in the form of a computer-readable medium claim. Other differences are present in pending claim 50 relative to patent claim 44. For example, pending claim 50 recites "notification interfaces" rather than "notification function members." However, "notification function members" was in the *original language* of patent claim 44. Therefore, the presence of the phrase "notification function members" in patent claim 44 does not indicate surrendered subject matter.

Pending claim 50 and patent claim 44 are reproduced below, with emphasis added to point to claim language that shows that pending claim 50 does not involve improper recapture.

> 50. A computer-readable medium having computer-executable instructions for causing a computer system to dynamically **notify a sink object from a source object, the computer system having a plurality of sink objects and source objects, each sink object having a notification** interface, **each source object having a connection point for** referencing **one or more notification** interfaces, the computer system performing a method comprising:
> **selecting a notification** interface **of the sink object;**
> **selecting a corresponding connection point of the source object, the selection based upon the notification** interface **that is selected;**
> **connecting the connection point selected and the notification** interface **selected, wherein a reference to the selected notification** interface **is stored** by **the selected connection point; and**
> **invoking the selected notification** interface **referred to by the stored reference to effect notification of the sink object.**

> 44. A computer system for **notifying a sink object from a source object, the computer system having a plurality of sink objects and source objects, each sink object having a** plurality of **notification** function members, **each source object having a** plurality of **connection points for** storing **one or more notification** function members, the system comprising:
> means for **selecting a notification** function member from among the plurality of function members **of the sink object;**
> means for **selecting a corresponding connection point** from among the plurality of connection points **of the source object, the selection based upon the notification** function member **that is selected** by the notification function member selection means;
> means for **connecting the connection point selected** by the connection point selection means **and the notification** function member **selected** by the notification member selection means, **wherein a reference to the selected notification** function member **is stored** within **the selected connection point; and**
> means for **invoking the selected notification** function member **referred to by the stored reference to effect notification of the sink object.**

As shown in the comparison above, pending claim 50 does not improperly recapture surrendered subject matter, and should be allowable.

4.   Claim 52

Previously, the Examiner rejected pending claim 52 due to alleged recapture of subject matter surrendered during prosecution of patent claim 27. Applicants respectfully disagree.

Pending claim 52 is based on patent claim 44 rather than patent claim 27, and does not improperly recapture surrendered subject matter. As explained above, patent claim 44 was not amended during prosecution. The differing language in pending claim 52 includes language directed to, for example, "notification interfaces" rather than "notification function members." However, "notification function members" was in the *original language* of patent claim 44. Therefore, the presence of the phrase "notification function members" in patent claim 44 does not indicate surrendered subject matter.

Pending claim 52 and patent claim 44 are reproduced below, with emphasis added to point to claim language that shows that pending claim 52 does not involve improper recapture.

> 52. A computer system for **notifying a sink object from a source object, the computer system having a plurality of sink objects and source objects, each sink object having a notification** interface, **each source object having a connection** point **for storing one or more notification** interfaces, the system comprising:
> **means for selecting a notification** interface;
> **means for selecting a corresponding connection point, the selection based upon the notification** interface **that is selected by the notification** interface **selection means;**
> **means for connecting the connection point selected by the connection** point selection means and the notification interface **selected by the notification** interface selection means, **wherein a reference to the selected notification** interface **is stored within the selected connection point; and**
> **means for invoking the selected notification** interface **referred to by the stored reference to effect notification of the sink object.**
>
> 44. A computer system for **notifying a sink object from a source object, the computer system having a plurality of sink objects and source objects, each sink object having a** plurality of **notification** function members, **each source object having a** plurality of **connection** points **for storing one or more notification** function members, the system comprising:
> **means for selecting a notification** function member from among the plurality of function members of the sink object;
> **means for selecting a corresponding connection point** from among the plurality of connection points of the source object, **the selection based upon the**

notification function member that is selected by the notification function member selection means;

> **means for connecting the connection point selected by the connection point selection means and the notification function member selected by the notification member selection means, wherein a reference to the selected notification function member is stored within the selected connection point; and**

> **means for invoking the selected notification function member referred to by the stored reference to effect notification of the sink object.**

As shown in the comparison above, pending claim 52 does not improperly recapture surrendered subject matter, and should be allowable.

D.   <u>The Reissue Oath/Declaration Is Not Defective</u>

Previously, the Examiner rejected claims 1-53 as being based upon an allegedly defective reissue declaration, due to alleged improper recapture of surrendered subject matter in pending claims 48-50 and 52. Applicants respectfully disagree. As explained above, none of pending claims 48-50 and 52 involve improper recapture.

The reissue declaration is not defective, and each of the pending claims should be allowed.
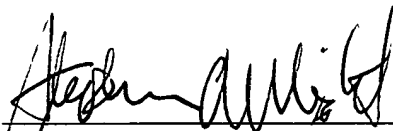
Conclusion

The claims in their present form should now be allowable. Such action is respectfully requested.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By _____
Stephen A. Wight
Registration No. 37,759

One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, Oregon 97204
Telephone: (503) 226-7391
Facsimile: (503) 228-9446

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